

Seattle Light Rail Review Panel Meeting Notes for October 5, 2004

Agenda Items

- Urban design & architecture
- Introduction to North Link

Commissioners Present

- Pam Beyette
- Kathy Hillenbrand
- Jay Lazerwitz
- Tory Laughlin-Taylor
- David Spiker

Public

- John Baggs

Staff and Presenters

- Debora Ashland, Sound Transit
- Scott Daniels, Sound Transit
- Don Dillon, Sound Transit, Segment Manager. 1st Hill/Capitol Hill
- Ron Endlich, Sound Transit
- Joe Gildner, Sound Transit, Technical Service Director, Deputy Director
- Phil Harrison, Sound Transit
- Tracy Reed, Sound Transit, Segment Manager, University Segment
- John Walser, Sound Transit
- Calvin Chow, SDOT
- Layne Cubell, SDC/DPD
- Lisa Rutzick, CityDesign
- Wilma Stordahl, CityDesign
- Barbara Wilson, SPC/DPD

LRRP Business

The meeting began with the introduction of new panel members, Kathy Hillenbrand, and introductions all around. Staff states that a new chair needs to be elected. David Spiker volunteered to be elected chair of LRRP. Pam Beyette seconded the motion and the vote for David Spiker for panel chair was unanimous.

The schedule for the panel was also discussed.

Sound Transit Update

Joe Gildner, Deputy Director of Technical Services

Ron Endlich, Sound Transit

John Walser, Sound Transit

Joe Gildner gave a quick update on construction of the Central Link and thanked the LRRP for the efforts that have brought them to the stage they are at today. Sound Transit presented an introduction to North Link, the segment from downtown to Northgate. The design includes 6 stations in 8 miles, and represents conceptual to preliminary engineering up to 30% of final design. The timetable is to complete preliminary engineering, develop a reliable schedule and cost estimates for North Link, from Convention Place to Northgate, by next spring. Sound transit appreciates efforts of the panel in getting the designs right and a “critical eye” is helpful. The efforts on the Central Link are also appreciated.

Each panel member was given copies of the North Link background sheet. Six open houses will be held later this month, starting next week. The open houses will reintroduce station designs to the communities. Work on the North Link actually started three years ago. Sound Transit completed the civil engineering and DEIS for the route on this map in May. The board approved the route and gave specific direction to follow-up on some station and access issues. Most of the north route is

tunneled from downtown up to Roosevelt, except for two elevated stations. The North Link is quite different from the Central Link in this way. The construction activity will be limited to a two block area around the stations, a limited range of impact, especially compared to the initial segment.

The open houses that Sound Transit is holding this month will reintroduce the station designs. It is likely that new station ideas will emerge along with old controversies. Financial information on North Link will be brought to the Board in mid 2006.

Discussion:

- David asks why there are not more stations, the distances between stations, the lack of a North Capitol Hill station, the enormous distances between stations north of there, run counter to all public transit efforts. What's the thinking behind that?
- Ron stated that previously more stations were considered, for example, a station at Roy Street and Broadway, and an additional Montlake or Portage Bay station. It comes down to money issues, geography, and density. Each underground station costs approximately \$100 million. There is a large cemetery and lower density north of the Broadway business district. Sound Transit has looked at options in the North Capitol Hill area. We would like to build more stations. North Link is an 8 mile alignment with 6 stations, which is pretty good coverage. Light Rail is being designed as a regional system. The highest densities are in first Hill, Capital Hill and the University District. That's some of the rationale.
- The counter arguments are, "Why build a system that isn't going to attract ridership because you don't have enough stations?" In a typical system you have stations that are about a third to half the distances you have planned for the North Link.
- This line will attract high ridership. We will be adding about 100,000 riders a day once the line is completed from downtown Seattle to Northgate. It will triple ridership. Could we gain more riders with more stations? That's true, but the more stops you make the slower the ride will be for the longer regional trips. There is a trade-off.
- Lisa asked what the possibility is for future stations after the system is built.
- If it's underground, it's very difficult once the system is built. There is a need to design the tunnel and platform, access to grade, and keep trains running every four minutes. At Royal Brougham, which is deferred, for example, the concrete platform will be poured for that future at-grade station.

John Walser explained that thirty per cent completion refers to the engineering phase. There are two very distinct phases of design. It is quite common to hire a separate engineering firm to do the pre-design from the firm that will do the final design. Right now Sound Transit is gathering information to procure a final design team, which will include a set of architects, urban planners, and landscape architects. Because of that, the architecture and landscape architecture work will not go beyond approximately 15%-20% at this time. The next team will do that about a year from now. We will be doing the site planning, the analysis, layouts, and organization. There is a lot of planning going on now, but not a lot of design detail at this time. In the next phase, architectural design will need to play 'catch-up' to engineering, and advance designs up to a schematic design, 30% completion, and move forward approximately one year from now. The prime consultant now is the architectural firm, ZGF. They have assembled a team that includes Karen Keist Landscape Architects, Nakano Associates, Hewitt Architects, and Via Suzuki Architects.

Introduction to North Link

Don Dillon, Sound Transit

Tracy Reed, Sound Transit

John Walser, Sound Transit

Phil Harrison, Sound Transit

North Link is divided into 3 segments:

Downtown, First Hill, Capitol Hill (VIA Suzuki Architects) Don is the segment manager.

Stadium, Brooklyn (ZGF) Tracy Reed is the segment manager.

Roosevelt and Northgate (Hewitt Architects) Phil Harrison is the segment manager.

The segment managers prefer to get LRRP input before going out to the community.

Segment 1:

Don Dillon, Sound Transit

First Hill Station: The First Hill station will be a deep-mined tunnel station on the north side of Madison Street, with entrances on Madison & Boylston and Madison & Summit. It will be across the street from Swedish Hospital with Seattle University to the east. The station will serve Virginia Mason, Harborview, and high-density residential. It is a very nice station location and high ridership is expected, approximately 10,000 riders per day. The tunnel is coming from under Pine Street, under I-5 and up to First Hill. Due to topography changes, this will be a very deep station, approximately 210' deep. This means that the tunnel and station will have to be mined, and the station will be served by three to four high speed elevators at the two entrance location described earlier. Engineers are still evaluating the number of elevators needed. There are two main engineering issues at this station:

- Simplify underground design to minimize excavation.
- Look at construction sequencing and construction impact issues. The mining work will occur 24 hours a day. Sound Transit is trying to minimize construction impacts.

Capital Hill Station: The Capital Hill station will be built underneath Nagle Place, east of Broadway Ave. and north of Seattle Community College with entrances on Broadway & John and another entrance to reach out towards the community college. Due to concerns from the Broadway business community the station location was shifted slightly to the east but the entrances were kept on Broadway. The station will be a cut-and-cover station, with a platform at 85 feet below grade. There will be escalators and stairs at this station. The main engineering issues at this station include:

- The need to evaluate the construction impacts to adjacent buildings.
- Optimizing the location of the south entrance and also looking at the pros and cons of putting an entrance at the west side of Broadway. There is also interest in a grade separated crossing at Broadway to serve the main community college building, but balancing that with the public safety issues and wanting to have pedestrians at the surface rather than underground.
- Light Rail will affect the landscaping at Lincoln Park. Sound Transit is working very closely with Parks and SPU on cut and cover of park. The construction is very close to the west edge of Lincoln Park, and will affect the landscaping and trees on that edge of the park.

Discussion:

- David asked about the sweeping curvature of the alignment from Westlake to the First Hill station and its impact on headways.
- Don responded that Sound Transit looked at eliminating the First Hill station during the environmental review process. The curvature impacts operating speed, but the time savings weighted against the ridership that would be lost by eliminating the First Hill station as well as First Hill as an urban center, the Board decided they wanted to keep First Hill as a station.
- Kathy expressed concern about safety concerns at the First Hill station, especially in regard to the elevators.
- This issue came up with the Beacon Hill station. Research did not show correlation between crime and escalator vs. elevator use. The high speed elevators can travel approximately 210 feet in approximately 38 seconds, and would have close circuit cameras installed. There will be two entrances/exits at the station. First Hill is a unique station for the North Link; it is the deepest station. The rest of the tunnel stations are cut-and-cover stations, more like the downtown bus tunnel.
- Pam asked about capacity.
- The system is being designed to accommodate headways of every 2 minutes. The stations will be served by 4-car trains, which match the platform lengths of the downtown tunnel stations. There is ample capacity. It is projected to move in excess of 16,000 riders per hour. For comparison, highway capacity is 2,000 cars per direction/hour.
- But what about the Light Rail capacity compared to the capacity of the elevators?
- Those numbers are derived from ridership forecasts for each individual station. It is estimated from expected ridership with the system is built out to Northgate, in 2030, plus the expectation for future growth and expansion. The ridership at the First Hill station will be 8,000-9,000 boardings/day and for the Capitol Hill station it will be 10,000 boardings/day. They will be high ridership stations and they are being sized accordingly.
- What is the radius around the station?
- The maps show a 5 minute walking radius of approximately 1,200 feet, beyond that, riders may come by bus, bicycle or be dropped off.
- Sound Transit will have information later on bike storage, bus drop-off zones, ticket vending, and access plans.
- Jay asked about the trip time from the platform to the surface at the Capital Hill station?
- I haven't heard that number, but it would be similar to coming out of the Pioneer Square tunnel station.
- Layne Cubell asked how the Broadway station is being designed to minimize the impacts to Lincoln Park.
- There would be construction impacts, all of the facilities will be below grade, you can restore the landscaping at the park. The station construction will not affect the reservoir or water feature. It will affect the outer pathway and some trees in a strip about 40' to 50' wide.
- Kathy asked if it was a good idea to build the park now. Could the timing of construction of park and station be better coordinated?
- Sound Transit has talked with both Parks and SPU about coordinating the construction. It doesn't make sense to stop their construction because there is still uncertainty of timing of North Link. There would be a minimum of 2 years of construction on the Lincoln Reservoir and most of the North Link construction will take place under the park and under the street.
- What is the tan color on the map?

- Capital Hill has cross-over tracks, the tan color indicates a switch. The purple is the station box.
- David Spiker asked if Sound Transit has done an overlay of the proposed design with the park.
- Yes. We have had multiple meetings. John responded that they are looking at a series of constraints, the park, some existing buildings. We are trying to see if we can work within some of the constraints or remove some of the constraints to have the least impact.
- Would it be better to have the cross-over tracks on the north instead of the south?
- There have been about 5 variants for the Capitol Hill station, and it was looked at in 1999. Placing the cross-over tracks on the north side has greater impacts on the business district, and the community would rather keep the construction south.

Segment 3:

Phil Harrison, Sound Transit

The segment from Roosevelt to Northgate shows two alignments. Two alternative station locations are still being considered for the Roosevelt station. The two alternatives will go all the way through preliminary engineering and cost estimating. The Sound Transit Board considered these two options in January. They could not decide on the station location, wanted more detail, and will decide next May or June.

Discussion:

- David asked if the freeway exit will be impacted at Ravenna.
- No. We're working with I-5. Sound Transit has to respect the I-5 right-of-way.
- All this up and down is still \$40-\$60 million cheaper?
- Yes.
- David commented that the west alignment had more potential overruns.
- It is because of topography. We will be diving into the hill here, and we have to get up over Ravenna.
- The area next to the church is tricky, very tight. We have to do quite a bit of work to make sure we get it right.

Roosevelt Station:

There are different options for the Roosevelt station. Option C would be an elevated station at approximately the same elevation as the I-5 freeway deck, 30' high, at the portal of Ravenna Blvd. and 8th Ave. NE, just south of 65th Street. This station has a center platform to the footprint has two station entrances., one at closer to 65th Street and one closer to Ravenna. This location would provide better connections to the Green Lake community. The station needs to relate to Metro transit and para-transit. We have to maintain access here for buses and cars. This is a very tight area. Sound Transit has to maintain a 23' distance from I-5. That is WSDOT's right-of-way for I-5 to allow for future expansion. On the ground plane that means we have room for a sidewalk, 8th Ave. NE, and another sidewalk. There's a large apartment building here that we don't want to damage right now.

Option A is a cut-and-cover station, in the business district, north of Whole Foods, at NE 65th Street and 12th Ave. NE. The community prefers this option. The station platform would be 85' deep. There would be a mezzanine level with two entrances, one relating to 65th Street the other to

Roosevelt. There is more opportunity for TOD here. However, the issues here are more property issues. Events are overtaking Sound Transit. There is proposed mixed-use development to put 200 apartment units in, as well as, a proposed mix-use development over the QFC. Sound Transit may reconfigure the station placement to avoid new condo buildings. They are hoping to jump ahead of the property issues to hold the site.

Discussion:

- Kathy asked about the possibility of developing the properties together.
- There is, but to do this station a tunnel from 65th Street to Brooklyn has to be mined first. You can't build something here before you tunnel. It would mean taking the whole site where QFC is and leveling it, and having a tunnel staging area. QFC would have to wait until decision is made by Sound Transit. Phil said the developer would have to wait 6 to 7 years. They're talking to us about joint development that would recognize the need for Sound Transit to use the site for staging.
- John stated that the people want the station in the business core but the construction would impact the businesses for approximately 3-4 years, from the start to finish.
- North Link still has to go on the ballot and be voted on in 2006. You would start construction in 2009 and finish in 2011-12.
- The 8th Ave NE location would cost less, but there are worries about impacts. Twenty homes would be displaced.
- The community overwhelmingly prefers the 12th Ave NE location and it would better serve the business district.

Northgate Station:

The North Link alignment would run along the freeway to the Northgate Mall and Northgate Transit Center. The Northgate station would be elevated. There are two station options at Northgate, one with an entrance on the mall property and an entrance at the transit center, the other with both entrances on the transit center parcel. King County has a TOD proposal for mixed-use development on the transit center parcel. They want to move the transit center to the street to better relate to the station. We want to build Light Rail to accommodate that TOD that will occur all over the site eventually. We're still deciding where to put the station, all on one block or split. Simon Properties, who owns the Northgate Mall, does not want a station entrance or the tail track on their property. They are concerned about losing parking capacity. The Board will make a decision on the station and has eminent domain. It is a board decision. Northgate would be the end of the line for some time, however, it is hoped that someday Light Rail would be extended to Shoreline and Snohomish County. In the foreseeable future, expansion of Light Rail would cross the right-of-way next to Northgate Mall.

Segment 2:

Ron Endlich, Sound Transit

John Walser, Sound Transit

Tracy Reed, Sound Transit

Montlake Vent:

A vent is needed for emergency tunnel ventilation and will be located next to SR 520, on the Hop In Market site. The Board selected this site and asked Sound Transit to try to avoid displacing the market or to allow for TOD after construction phasing is completed. A traction power substation is

not needed at this facility, so Sound Transit is trying to consolidate to make the structure more compact. One of the big changes in the last several months is that DOT is seeking additional right-of-way to improve their ramp access, so the design is evolving. Oct. 21st there will be a Montlake community meeting to show the specifics of the design. We'll have more information in the next couple of weeks.

Discussion:

- Where are the Metro stops around here?
- There are bus stops in the area, and a fly-over stop down in the SR 520 right-of-way.
- David asked why there isn't a station proposed for this site?
- There's one a ½ mile north at Husky Stadium.
- Yes, which is an appropriate distance to have between stations.
- How does this impact future SR 520 plans?
- Sound Transit is working with DOT to make sure that their design and our design fit together here. North Link would be out of the path of the SR 520 expansion.

Stadium Station:

The stadium station site would be located just east of Montlake Boulevard. The brown on the map shows the construction zone. Maroon shows the cross-over tracks. The light grey area shows the station platform. This is a cut-and-cover station with a platform 100' deep. The south entrance will be on the stadium side of Montlake Boulevard., and the north entrance where we would extend a below-grade path underneath Montlake to bring people across. The headhouse placement would miss the Rainier Vista. There is a tremendous amount of usage at this station that would be for the UW Medical Center and the Health Sciences Complex. Sound Transit is studying additional grade separation crossings from this station, but there is the challenge of creating safety, security, etc. We could possibly tie into the parking level of the new surgery facility of the UW Medical Center. We're taking a look at a few different options there.

Discussion:

- Why not push the station further west?
- We want to avoid doing cut-and-cover construction in the middle of Montlake Boulevard. There would be a lot of construction activity for about a period of three years. We're trying to keep our footprint within the parking lot area and work with the University of Washington on the issues associated with that. We also want to avoid having structures in the Rainier Vista.
- The station will have a vent structure that will be 12-14 feet tall on the south side.

Brooklyn Station:

At the Brooklyn station the cut-and-cover would occur in the street, between 43rd Street and 45th Street. The north entrance would be in the plaza of the Safeco tower, and the south entrance would be at the northeast corner of Brooklyn Ave. and 43rd Street. The cross-section is more balanced than some. There is a cut-and-cover under the street right-of-way of Brooklyn.

Discussion:

- What is on the site now?
- There is a surface parking lot, the Washington Mutual bank, and Safeco storage. The International House of Pancakes is on the northwest corner of Brooklyn and 43rd Street.

- Kathy asked about plans to link SR 520 traffic and transit connections. Buses pass through. There is no parking at any of the stations.
- Sound Transit needs to talk further with Metro and the SR 520 Project so that ability to provide connections is not obstructed.
- Buses would stop at the stadium station near Montlake.
- Providing connections across Lake Washington is bigger than the two projects together.
- But the problem is that once you build Sound Transit Light Rail there without a transit connection, the possibility of making the connection in the future is severely limited. Right now it is too piecemeal. It needs to be forced back together.
- It is a good point and one that all the agencies seem to be wrestling with. Work is on-going with I-90 as well, and some of this is Phase II planning.
- The focus seems to be to emphasize rapid transit along the I-90 corridor, as opposed to the SR 520 corridor.
- David stated that if you pull back and look at the big picture, at the two major connections across the lake, where they land on each side is where you should have a transit hub.

The meeting adjourned at 5:40 pm.